Submit Study Plan to MDEQ for Approval

Within 6 months of the effective date of your permit coverage, you must complete the study plan and submit to the MDEQ, Surface Water Quality Division District Supervisor for approval. District staff may request changes in your monitoring plan. If the District Supervisor does not take action to approve or comment on the plan within 90 days after submittal, and the Storm Water Pollution Prevention Plan has been fully implemented, then you shall begin monitoring in accordance with the plan submitted.

If the area for which you plan to characterize the discharge is an area of environmental contamination (Part 201 of Act 451, 1994 as amended) please submit a copy of your Storm Water Pollution Prevention Plan (SWPPP) along with the short-term characterization study plan.

Data Interpretation

Unlike most study designs, this monitoring plan does not need to identify information on data interpretation. MDEQ will review the data submitted, and determine if there is an expectation that water quality problems may result from storm water discharges from your special use area.

Short-term Characterization Study of Storm Water Discharges

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A Requirement of the
Michigan General Permit
Storm Water Discharges With Required Monitoring

Required Components of
Your Monitoring Plan

Michigan Department of Environmental Quality
Surface Water Quality Division

Purpose of the Study

The purpose of the short-term characterization study is to determine the quality of the storm water being discharged from your special use area. The data from the study will be used to determine if discharges from this special use area comply with the discharge limitation in Part I.A.1 of the general permit. The special use area is either a secondary containment area or an area of environmental contamination. Please read Part I.A.2 of the general permit for additional information on this requirement.

To ensure that this study provides useful data, you need to follow certain steps in designing and carrying out your study. Your study plan should include all of the following information. Please note that this guidance is **not** intended to serve as guidelines for quality assurance. It is our expectation that personnel conducting this study will be properly trained in how to conduct all facets of this study.

Describe the Situation

- Identify the special use area (*e.g. a secondary containment area for fuel storage tanks*), and approximate size or volume (*e.g. approximately 100 cubic feet*).
- Identify the way in which discharges from this area reach surface waters; specify the receiving water (*e.g. valves are periodically opened to allow the release of storm water; this storm water runs across pavement into a municipal storm sewer that discharges to the Kalamazoo River*).
- Identify the potential contaminants of concern (*e.g. diesel fuel*).

Sampling Methods

- Identify the pollutants that will be monitored.
- If following prescribed standard sampling method(s), identify the source(s) or reference(s) for the method(s).
- Identify the location or locations at which samples will be taken.
- Identify the method of sampling (*e.g. grab samples; composite samples*).
- To adequately evaluate certain contaminant concentrations, additional data may be needed (e.g. hardness of the receiving stream).
- Identify the person or people who will conduct the sampling.

Number of Samples and Sample Events

- Identify the number of samples that will be taken for each sample event (*e.g. 1 sample per location per sampling event will be taken*).
- Identify the number of sampling events necessary to characterize the quality of the discharge; at a minimum 3 events must be monitored.
- Identify the frequency or spacing of these events, as relevant (*e.g. at least 72 hours since previous measurable storm event*).
- Identify the timing of the sampling events (*e.g. first 30 minutes of each rainstorm greater than 0.1 inch; whenever discharge from the containment area becomes necessary*).
- Identify the approximate time of year (seasons) samples will be taken.

Sample Analysis

- Note the EPA approved analytical method to be used (40 CFR part 136).
- Identify the quantification level for each analysis.
- Identify the laboratory performing the analysis.
- Note if the laboratory has EPA certification, or if the lab or technician have other qualifications.

Report

- Indicate the approximate date you intend to finish the study (realizing this may be dependent upon precipitation events or other factors), and when you plan to submit the results to MDEQ.
- Plan to include dates of sampling and analysis, and if handling times were met or exceeded.
- Plan to include all data, including actual quantification levels, and provide any other notations provided by the laboratory. Attach all sheets provided by the laboratory.
- When actual rain event discharges are monitored, include date and duration of the storm event, the rainfall measurement or estimate, duration between the storm event sampled and the end date of the previous measurable storm event, pollutant concentration(s) and estimated total volume of the discharge.